北京大学前沿计算研究中心
Center on Frontiers of Computing Studies, Peking University

静园**5**号院
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The Economics of Machine Learning

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Host：邓小铁 教授
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静园五院102室

Abstract

This talk will overview our recent works on the economics of machine learning, with two complementary themes: machine learning for economics and, conversely, economics for machine learning. The first theme focuses on designing and analyzing ML algorithms for economic problems, ranging from foundational game-theoretic models to real-world applications such as recommender systems and national security. The second theme employs economic principles to study machine learning itself, such as the pricing of data, information and ML models, and designing incentive mechanisms to improve large-scale ML research peer review. While the research focuses primarily on developing methodologies, we will also highlight some real-world impacts of these works, including ongoing large-scale live experiments and potential deployments in real applications.

Biography

Haifeng Xu is an assistant professor in computer science at the University of Chicago, and directs the Strategic Intelligence for Machine Agents (SIGMA) research lab which focuses on designing intelligent AI systems that can effectively learn and act in informationally complex multi-agent setups. His research has been recognized by multiple awards, including Early Career Spotlight at IJCAI, a Google Faculty Research Award, ACM SIGecom Dissertation Award (honorable mention) and IFAAMAS Distinguished Dissertation Award (runner-up). Prior to UChicago, he was the Alan Batson Assistant Professor at the University of Virginia, and even before that a postdoc at Harvard. Haifeng obtained his PhD in Computer Science from the University of Southern California, advised by Profs. Milind Tambe and Shaddin Dughmi.

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